

REMARKS

The present Amendment cancels claims 4, 5, 7 and 8, without prejudice or disclaimer, and leaves claims 6 and 9 unchanged. Therefore, the present application has pending claims 6 and 9.

35 U.S.C. §103 Rejections

Claims 4-9 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,970,930 to Donovan et al. (“Donovan”) in view of U. S. Patent Application Publication No. 2004/0109414 to Choi et al. (“Choi”). As indicated above, claims 4, 5, 7 and 8 were canceled. Therefore this rejection regarding claims 4, 5, 7 and 8 is rendered moot. Regarding the remaining claims 6 and 9, Applicants submit that the features of the present invention, as now more clearly recited in claims 6 and 9, are not taught or suggested by Donovan or Choi, whether taken individually or in combination with each other in the manner suggested by the Examiner. Therefore, Applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Amendments were made to the claims to more clearly describe features of the present invention. Specifically, amendments were made to the claims to more clearly recite that the present invention is directed to a peer-to-peer communication system as recited, for example, in independent claim 1.

The present invention, as recited in claim 6, provides a peer-to-peer communication system. The system includes session relay apparatuses which relay session control messages used for peer-to-peer communication between communication terminals. The system also includes edge nodes, in a network coupling the communication terminals, accommodating the communication terminals

to the network. The system further includes a core node which executes a packet relay process in the network.

According to the present invention, as recited in claim 6, a first session relay apparatus receives a session control message from a first communication terminal and a second session relay apparatus receives a session control message from a second communication terminal.

Also according to the present invention, as recited in claim 6, when the first session relay apparatus receives a session establishment request from the first communication terminal as a communication source the first session relay apparatus transfers the session establishment request to the second session reply apparatus. Furthermore, the second session relay apparatus transfers the session establishment request to the second communication terminal. If the second communication terminal is available to communicate, the second communication terminal transfers a message representing that the communication is available, to the second session relay apparatus. Further, after the second session relay apparatus transfers the message representing that the communication is available, to the first session relay apparatus, the first session relay apparatus generates a packet relay processing policy for a peer-to-peer communication packet, distributes the policy to a first edge node accommodating the first communication terminal and causes the first edge node to register the policy and the second session relay apparatus generates a packet relay process policy to the peer-to-peer communication packet, distributes the policy to a second edge node accommodating the second communication terminal and causes the second edge node to register the policy to finish a policy setting process to the edge nodes. Even further, the peer-to-peer communication packet from the first communication terminal is set for a

next relay node based on the policy in the first edge node to select a network to be relayed. The prior art does not disclose all of these features.

The above described features of the present invention, as now more clearly recited in the claims, are not taught or suggested by any of the references of record. Specifically, the features are not taught or suggested by either Donovan or Choi, whether taken individually or in combination with each other.

Donovan teaches a method and system of providing differentiated services. However, there is no teaching or suggestion in Donovan of the peer-to-peer communication system as recited in claim 6 of the present invention.

Donovan discloses a method for combining Internet protocols in a Differentiated Services model environment. The Session Initiation Protocol (SIP) and Common Open Policy Service (COPS) are combined together to provide methods of setting up a session and tearing down a session, while maintaining Authentication, Authorization, and Accounting (AAA) policies. The Open Settlement Policy (OSP) is also combined with SIP and COPS. This combination provides for an interchange of parameters between session setup, teardown, authorization, policy, Quality of Service (QoS), and usage reporting.

One feature of the present invention, as recited in claim 6, includes where when the first session relay apparatus receives a session establishment request from the first communication terminal as a communication source . . . the peer-to-peer communication packet from the first communication terminal is set for a next relay node based on the policy in the first edge node to select a network to be relayed. Donovan does not disclose this feature.

In a communication network with a selectable relay network, as in the present invention, the bandwidth of the network can be secured by selecting a relay network

based on a policy. As shown in Fig. 10, and as described in the accompanying text, a mesh configuration of the network is provided using the session relay apparatus 10 as a communication network with a selectable relay network. Networks 40a, 40b, 40c exist as relay networks. The band of each network can be secured by selecting a relay network in accordance with the type of the peer-to-peer communication data. In the case where the relay network designated by numeral 40a is selected by policy setting, for example, the address of the relay node 30aa connected to the relay network 40a is registered in the "relay network" item of the policy storage unit 220 (Fig. 5). As a result, the session relay apparatus 10a transfers to the relay node 30aa those packets received from the communication terminal 15a which meet the required conditions, and transmits them through the relay network 40a to the communication terminal 15b. This embodiment is effectively applicable to a case in which with different policies preset in the networks 40a, 40b and 40c, for example, a network using a policy conforming with the packet transmitted from the communication terminal A 15a to the communication terminal B 15b is selected.

This is quite different from Donovan.

Donovan merely discloses that the setting of the QoS is made based on a DiffServ by a set policy. As described in column 6, lines 30-34, and as shown in Fig. 5, step 19, Donovan provides where the POL1 sends a DEC message to R1, telling R1 of the appropriate policy for the session packets. There is no teaching or suggestion in Donovan, whatsoever of the selection of a path based on policy, as in the present invention.

Therefore, Donovan fails to teach or suggest "wherein when the first session relay apparatus receives a session establishment request from the first communication terminal as a communication source . . . the peer-to-peer

communication packet from the first communication terminal is set for a next relay node based on the policy in the first edge node to select a network to be relayed" as recited in claim 6.

The above noted deficiencies of Donovan are not supplied by any of the other references of record, namely Choi, whether taken individually or in combination with each other. Therefore, combining the teachings of Donovan and Choi in the manner suggested by the Examiner still fails to teach or suggest the features of the present invention as now more clearly recited in the claims.

Choi teaches a method of providing differentiated service based quality of service to voice over Internet protocol packets through a router. However, there is no teaching or suggestion in Choi of the peer-to-peer communication system as recited in claim 6 of the present invention.

Choi discloses method of providing Differentiated Service (DiffServ) based Quality of Service (QoS) to Voice over Internet Protocol (VoIP) packets through a router. In the QoS providing method, VoIP call session information including source and destination IP addresses, source and destination user datagram protocol (UDP) port numbers, and requested QoS information is provided to the QoS control server by the VoIP call control device. Source and destination routers are found using the VoIP call session information and the VoIP call session information requiring provision of QoS is sent to the source and destination routers by the QoS control server. Choi's method can recognize VoIP packets, provide QoS to the VoIP packets, and transmit voice packets of high quality.

One feature of the present invention, as recited in claim 6, includes where when the first session relay apparatus receives a session establishment request from the first communication terminal as a communication source . . . the peer-to-

peer communication packet from the first communication terminal is set for a next relay node based on the policy in the first edge node to select a network to be relayed. Choi does not disclose this feature, and the Examiner does not appear to rely upon Choi for teaching this feature.

Therefore, Choi fails to teach or suggest "wherein when the first session relay apparatus receives a session establishment request from the first communication terminal as a communication source . . . the peer-to-peer communication packet from the first communication terminal is set for a next relay node based on the policy in the first edge node to select a network to be relayed" as recited in claim 6.

Both Donovan and Choi suffer from the same deficiencies, relative to the features of the present invention, as recited in the claims. Therefore, combining the teachings of Donovan and Choi in the manner suggested by the Examiner does not render obvious the features of the present invention as now more clearly recited in the claims. Accordingly, reconsideration and withdrawal of the 35 U.S.C. §103(a) rejection of claims 6 and 9 as being unpatentable over Donovan in view of Choi are respectfully requested.

The remaining references of record have been studied. Applicants submit that they do not supply any of the deficiencies noted above with respect to the references used in the rejection of claims 6 and 9.

In view of the foregoing amendments and remarks, Applicants submit that claims 6 and 9 are in condition for allowance. Accordingly, early allowance of claims 6 and 9 is respectfully requested.

To the extent necessary, the applicants petition for an extension of time under 37 CFR 1.136. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, or credit any overpayment of fees, to the deposit account of MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C., Deposit Account No. 50-1417 (referencing Attorney Docket No. 500.43229X00).

Respectfully submitted,

MATTINGLY, STANGER, MALUR & BRUNDIDGE, P.C.



Donna K. Mason
Registration No. 45,962

DKM/cmd
(703) 684-1120